

REFERENCES

- Abdullah, A. Z., Salamatinia, B., Mootabadi, H., & Bhatia, S. (2009). Current status and policies on biodiesel industry in Malaysia as the world's leading producer of palm oil. *Energy Policy*, 37, 5440-5448.
- Abdullah, A. Z., Razali, N., Mootabadi, H., Salamatinia, B., ... (2007). Critical technical areas for future improvement in biodiesel technologies. *Environmental Research Letters* 2, 1-6.
- Abu-Zaid, M. (2004). Performance of single cylinder, direct injection Diesel engine using water fuel emulsions. *Energy Conversion & Management*, 45, 697-705.
- Al-Iwayzy, S. H. (2010). *The use of Microalgae Biodiesel in Diesel Engines*: Faculty of Engineering and Surveying USQ.
- Babu, A., & Devaradjane, D. (2003). Vegetable oils and their derivatives as fuels for CI engines. An overview. . *SAE 2003-01-0767*.
- Bahadur, N. P., Boocock, D. G. B., & Konar, S. K. (1995). Liquid hydrocarbons from catalytic pyrolysis of sewage sludge lipid and canola oil: evaluation of fuel properties. *Energy Fuels*, 9(2), 248-256.
- Bala, B. (2005). Studies on biodiesels from transformation of vegetable oils for diesel engines. *Energy Edu Sci Technol*, 15, 1-43.
- Balat, M., & Balat, H. (2008). A Critical Review of Bio-diesel as a Vehicular Fuel. *Energy Conversion and Management*, 49(2727-2741).
- Benajes*, J., Molina, S., Novella, R., & DeRudder, K. (10 January 2008.). Influence of injection conditions and exhaust gas recirculation in a high-speed direct-injection diesel engine operating with a late split injection. *Proc. IMechE Part D: J. Automobile Engineering*, 222, 13.
- Bellis, M. (Producer). (2011, 14 February 2011, 10.25 am) Rudolf Diesel (1858 - 1913). retrieved from <http://inventors.about.com/library/inventors/bldiesel.htm>
- Biodiesel Specification*. (2006.). Paper presented at the Indonesian National Standardization Agency
- Bijalwan, A., Sharma, C., & Kediya, V. (2006). Bio-diesel revolution. *Science Reporter*, 14-17.
- Biomass. (2008, 22.01.2011) *What is biomass?* retrieved from http://www.biomassenergycentre.org.uk/portal/page?_pageid=74,15246&_dad=portal&_schema=PORTAL
- Board, E. B. (2011). Statistics: The EU biodiesel industry. Retrieved January 8, 2012, from the European Biodiesel Board: <http://www.ebb-eu.org/stats.php>

- Board, N. B. (2007). *Specification for Biodiesel*.
- Bozbas, K. (2008). Biodiesel as an Alternative Motor Fuel: Production and Policies in the European Union. *Renewable and Sustainable Energy Reviews* 12, 542-552.
- Cadenas, A., & Cabezudo, S. (1998). Biofuels as sustainable technologies: Perspectives for less developed countries. *Technol Forecasting Soc Change*, 58, 83–103.
- Can, O., Celikten, I., & Usta, N. (2004). Effects of ethanol addition on performance and emissions of a turbocharged indirect injection Diesel engine running at different injection pressures. [doi: DOI: 10.1016/j.enconman.2003.11.024]. *Energy Conversion and Management*, 45(15-16), 2429-2440.
- Center, B. E. (Producer). (2008, 22.01.2011) Biomass. *What is biomass?* retrieved from http://www.biomassenergycentre.org.uk/portal/page?_pageid=74,15246&_dad=portal&_schema=PORTAL
- Colin, G., Giansetti, P., Chamaillard, Y., & Higelin, P. (2007). In-Cylinder Mass Estimation Using Cylinder Pressure. *SAE Technical Paper 2007-24-0049*.
- Conceic, M. M., Candeia, R. A., Silva, F. C., Bezerra, A. F., Jr, V. J. F., Souza, A. G. et al. (2007). *Renewable and Sustainable Energy Reviews*, 11, 964.
- Cheah, K., Choo, Y., A.N, M., & B. Y. (1998). Production technology of palm diesel. *Malaysia*, 5, 207–226.
- Client, M. (2008). *Biodiesel 2020: A Global Market Survey* (Second ed.): Emerging Markets Online.
- Demirbas, A. (2006). Biodiesel production via non-catalytic SCF method and biodiesel fuel characteristic. *Energy Conversion & Management*, 47, 2271-2282.
- Demirbas, A. (2008). *Biodiesel: A Realistic Fuel Alternative for Diesel Engines*: Springer.
- Demirbas, A. (2006). Global biofuel strategies. *Energy Educ Sci Technol*, 17, 27–63.
- Demirbas, A. (2008). Biofuels sources, biofuel policy, biofuel economy and global biofuel projections. *Energy Conversion & Management*, 49, 2106-2116.
- Demirbas, A. (Part A 2007). Combustion systems for biomass fuels. *Energy Sources* 29, 303-312.

- Dempsey, P. (2008). *Troubleshooting and repairing diesel engines (fourth edition)*: The McGraw-Hill Companies.
- Ekrem, B. (2010). Effects of biodiesel on a DI diesel engine performance, emission and combustion characteristics. [doi: 10.1016/j.fuel.2010.05.034]. *Fuel*, 89(10), 3099-3105.
- Elder, M., Prabhakar, S., & Matsumoto, J. R. N. (2008). Prospects and challenges of biofuels in Asia: policy implications. In: Hamanaka H, Morishima A, Mori H.
- Energy, B. A. (Producer). (2010, 22.01.2011) Biomass as a renewable energy source. *Biomass Alternative Energy*. retrieved from <http://www.biomass.net/Biomass-Alternative-Energy.html>
- Erol, M., Haykiri-Acma*, H., & Kuçukbayrak, S. (2010). Calorific value estimation of biomass from their proximate analyses data. *Renewable Energy* 35, 170–173.
- Fernando, S., Karra, P., Hernandez, R., & Jha, S. K. (2007). Effect of incompletely converted soybean oil on biodiesel quality. *Energy*, 32, 844–851.
- Foon, C. S., May, C. Y., Liang, Y. C., Ngan, M. A., & Basiron, Y. (2005). Palm Biodiesel: Gearing Towards Malaysian Biodiesel Standards. *Malaysian Palm Oil Board*.
- Fo, L. (2006). World ethanol markets: the outlook to 2015. *Am Muhlengraben (Germany)*.
- Ganesan, V. (2003). *Internal Combustion Engines* (Second ed.). New Delhi: Tata Mc Graw Hill Company Limited.
- Gerpen, J. V., Shanks, B., & Pruszko, R. (2004). *Biodiesel Analytical Methods* (No. NREL/SR-510-36240): Iowa State University.
- Gonsalves, J. B. (2006). *An Assessment of the Biofuels Industry*. Paper presented at the IndiaUnited Nations Conference on Trade and Development. Retrieved from http://www.unctad.org/en/docs/ditcted20066_en.pdf
- Gopinath, A., Puhon, S., & Nagarajan, G. (2010). Effect of biodiesel structural configuration on its ignition quality. *International Journal of Energy and Environment*, 1(2), 295-306.
- Gorge. (2011). Biodiesel Testing Methods. *National Scenic Area*.
- GmbH, R. B. (2004). *Diesel-Engine Management 3rd Edition* (Third ed.): Robert Bosch GmbH.
- Heywood, J. B. (1988). *Internal Combustion Engine Fundamentals* McGraw-Hill

- Hountalas, D. T., Kouremenos, D. A., K.B.B., Schwarz, V., & Mavropoulos, G. C. (2003). Effect of Injection Pressure on the Performance and Exhaust Emissions of a Heavy Duty DI Diesel Engine. *SAE, 2003-01-0340*.
- <http://physics.info/viscosity/>, G. E. (Producer). (1998-2010, 10 February 2011, 9.27p.m) The Physics Hypertextbook - Viscosity. retrieved from <http://physics.info/viscosity/>
- Indonesia. (2006.). *Biodiesel Specification*. Paper presented at the Indonesian National Standardization Agency
- Institute, W. (2007). Biofuels for transport: global potential and implications for sustainable energy and agriculture. *London/Sterling: Earthscan*.
- Jung, G. S., Sung, Y. H., Choi, B. C., & Lim, M. T. (2009). Effects of mixture stratification on HCCI combustion of DME in a rapid compression and expansion machine. *INTERNATIONAL JOURNAL OF AUTOMOTIVE TECHNOLOGY, 10(1)*, 1-7.
- Jayed, M. H., Masjuki, H. H., Saidur, R., Kalam, M. A., & Jahirul, M. I. (2009). Environmental aspects and challenges of oilseed produced biodiesel in Southeast Asia. *Renewable and Sustainable Energy Reviews, 13*, 2452-2462.
- Kalam, M. A., & Masjuki, H. H. (2008). Testing palm biodiesel and NPAA additives to control NO_x and CO while improving efficiency in diesel engines. *Biomass & Bioenergy, 32*, 1116-1122.
- Kardash, E., & Tur'yan, Y. I. (2005). Acid Value Determination in Vegetable Oils by Indirect Titration in Aqueous-alcohol Media. *Croatica Chemica Acta, 78(1)*, 99-103.
- King P, editors. Climate change policies in the Asia-Pacific: re-uniting climate change and sustainable development. *Hayama: Institute for Global Environmental Strategies*, 105–131.
- Knothe, G. (2005a). *Fuel Process Technology, 86*, 1059.
- Knothe, G. (2005b). Dependence of biodiesel fuel properties on the structure of fatty acid alkyl esters. *Fuel Process Technology, 86*, 1059-1070.
- Knothe, G., Gerpen, J. V., & Krahl, J. (2005). *The Biodiesel Handbook*.
- Korbitza, W., Friedricha, S., Wagingerb, E., & Worgetterc, M. (2003). Worldwide review on biodiesel production. *IEA Bioenergy Task 39, Subtask "Biodiesel"*.
- Koizumi, T., & Ohga, K. (2007). Biofuels Policies in Asian Countries: Impact of the Expanded Biofuels Programs on World Agricultural Markets. *Journal of Agricultural & Food Industrial Organization, 5(2)*.

- Larson, D. E. D. (2008). *Biofuel production technologies: status, prospects and implications for trade and development*. Paper presented at the United Nations Conference on Trade and Development.
- Labeckas, G., & Slavinskas, S. (2006). The Effect of Rapeseed Oil Methyl Ester on Direct Injection Diesel Engine Performance and Exhaust Emissions. *Energy Conversion and Management*, 47, 1954-1967.
- Lee, C. S. (1997). The Influence of Fuel Spray Characteristics on the Engine Performance and Emission in the Direct Injection Type Diesel Engine. *Journal of ILASS, Korea*, 2(2), 43-50.
- Lee, Q. F. (2006, 10 May). Biodiesel – a renewable energy source <http://biodieselttech.blogspot.com/2006/06/bio-diesel-renewable-energy-source.html>
- Lee, J., & Park, S. (2004). Recent developments on biofuels for transport in Korea. *In: Proceedings of the second international conference on sustainable energy system, Japan.*, p.93–97.
- Lim, S., & Teong, L. K. (2010). Recent trends, opportunities and challenges of biodiesel in Malaysia: An overview. *Renewable and Sustainable Energy Reviews*, 14, 938-954.
- Mamat, R., Abdullah, N. R., Xu, H., Wyszynski, M. L., & Tsolakis, A. (2009a). Effect of Air Intake Pressure Drop on Performance and Emissions of a Diesel Engine Operating with Biodiesel and Ultra Low Sulphur Diesel (ULSD). *ICREPQ'09*.
- Mamat, R., Abdullah, N. R., Xu, H., Wyszynski, M. L., & Tsolakis, A. (2009b). Effect of Fuel Temperature on Performance and Emissions of a Common Rail Diesel Engine Operating with Rapeseed Methyl Ester (RME). *SAE International*, 01, 1896.
- Mamat, C. J. (2009a). Bajet untuk penyelidikan sawit akan ditambah.
- Mamat, R. (2009). *Performance and Emission Characteristics of an Automotive Diesel Engine Using Biodiesel Fuel with The Influence of Air Intake Variables*. The University of Birmingham Birmingham.
- Martyr, A. J., & Plint, M. A. (2007). *Engine Testing*. New York: Butterworth-Heinemann.
- Mengjie, W., & Lingjuan, M. (2008). *Biomass initiative inventory in (the) PRC: policy and energy crops and bioethanol conversion technology*. Paper presented at the Sustainability of GBEP, Rio de Janeiro.

- Meher, L. C., Sagar, D. V., & Naik, S. N. (2006). Technical aspects of biodiesel production by transesterification—a review. *Renewable and Sustainable Energy Reviews*, 10, 248-268.
- Menezes, E. W. D., Silva, R. D., Cataluna, R., & Ortega, R. J. C. (2006). Effect of ethers and ether/ethanol additives on the physicochemical properties of diesel fuel and on engine tests, *Fuel*, 815-822.
- Monteiro, M. R., Ambrozin, A. R. P., Lião, L. M., & Ferreira, A. G. (2008). Critical review on analytical methods for biodiesel characterization. [doi: DOI: 10.1016/j.talanta.2008.07.001]. *Talanta*, 77(2), 593-605.
- Montgomery, D. T., & Reitz, R. D. (2001). Effects of Multiple Injections and Flexible Control of Boost and EGR on Emissions and Fuel Consumption of a Heavy-Duty Diesel Engine. *SAE Paper*, 2001-01-0195.
- Moraes, M. S. A., Krause, L. C., Cunha, M. E. d., Faccini, C. S., Menezes, E. W. d., Veses, R. C. et al. (2008). Tallow Biodiesel: Properties Evaluation and Consumption Tests in a Diesel Engine. *Energy & Fuels*, 22, 1949-1954.
- MPOB. (2005). *Palm biofuel and palm biodiesel fuels for the future.*: Malaysian palm oil board under Ministry of Plantation Industries and Commodities.
- Murugesan, A., Umarani, C., Subramanian, R., & Nedunchezian, N. (2009). Biodiesel as an alternative fuel for diesel engines—A review. *Renewable and Sustainable Energy Reviews* (13), 653–662.
- NIST (Producer). (2007) White paper on internationally compatible biofuel standards, tripartite task force Brazil. European Union & United States of America, retrieved from www.nist.gov
- Noort, L. v. d., Velden, C. t., Vervuurt, R., Wijnen, L., & Zon, L. v. (December 2006). *Size does matter: The possibilities of cultivating Jatropha curcas for biofuel production in Cambodia.*, UNIVERSITEIT VAN AMSTERDAM.
- Ozer Can ^a, Ismet C elikten ^b, & ^c N. U. (2004). Effects of ethanol addition on performance and emissions of a turbocharged indirect injection Diesel engine running at different injection pressures. *Energy Conversion & Management*, 45, 2429-2440.
- Palm biofuel and palm biodiesel fuels for the future.* (2005). Malaysian palm oil board under Ministry of Plantation Industries and Commodities.
- Prankl, H. (2001). *Standardization of Biodiesel*: Federal Institute of Agricultural Engineering (BLT) Austria.
- Pulkrabek, W. W. (2004). *Engineering Fundamentals of the Internal Combustion Engine* (Second ed.): Pearson-Prentice Hall.

- Rajput, R. K. (2005). *A Textbook of Internal Combustion Engines* (First ed.). New Delhi: Laxmi Publications (P) Ltd.
- Robinson, S. (2004). *Simulation: The Practice of Model Development and Use*. The Atrium, Southern Gate, Chichester, West Sussex PO19 8SQ, England: John Wiley & Sons Ltd.
- Rupilius, W. (2005). Palm Oil Based Biodiesel Has Higher Chances Of Survival. *Bernamea*.
- Sani, A. R. (2009). Sektor pengangkutan Jepun di gesa guna biodiesel sawit. *Berita Harian*. Retrieved from http://www.bharian.com.my/Current_News/BH/Saturday/BeritaSawit/S
- Sani, A. R. (Producer). (2009b) Pengeluaran minyak sawit menaik 8.5peratus. retrieved from <http://www.bharian.com.my>
- Schuchardta, U., Serchelia, R., & Vargas, R. M. (1998). Transesterification of Vegetable Oils: a Review. *J. Braz. Chem. Soc*, 9(1), 199-210.
- Semin, Bakar, R. A., & Ismail, A. R. (2008). Investigation of Diesel Engine Performance Based on Simulation *American Journal of Applied Sciences*, 5(6), 610-617.
- Semin, Idris, A., & Ismail, A. R. (2009). Engine Cylinder Fluid Characteristics of Diesel Engine Converted to CNG Engine. *European Journal of Scientific Research*, 26(3), 443-452.
- Singh, S. P., & Singh, D. (2010). Biodiesel production through the use of different sources and characterization of oils and their esters as the substitute of diesel: A review. *Renewable and Sustainable Energy Reviews*, 14, 200-216.
- Southeast Asia. *Renewable and Sustainable Energy Reviews*, 13, 2452-2462.
- Standards, C. (2009). Automotive fuels - Fatty acid methyl esters (FAME) for diesel engines - Requirements and test methods, *UNE-EN 14214:2009*.
- Starikovskaia, S. M. (2006). Plasma assisted ignition and combustion. *JOURNAL OF PHYSICS D: APPLIED PHYSICS*, 39, 265-299.
- Study, M. C. (2008). *Biodiesel 2020: A Global Market Survey* (Second ed.): Emerging Markets Online.
- Tan, K., Lee, K., Mohamed, A., & Bhatia, S. (2009). Palm oil: addressing issues and towards sustainable development. *Renewable and Sustainable Energy Reviews*, 13(2), 420-427.

- Tat, M. E., & Gerpen, J. H. V. (2000). The specific gravity of biodiesel and its blends with diesel fuels. *Journal of the American Oil Chemists' Society*, 77(2), 115-119.
- Tonkin, I. (Producer). (2009, June 9, 2010) Global biodiesel production reaches record high, retrieved from <http://www.roadtransport.com/blogs/future-fuel-solution-debate/2009/10/global-biodiesel-production-reaches-record-high.html>
- Tsolakis, A., Megaritis, A., Wyszynski, M. L., & Theinnoi, K. (2007). "Engine performance and emissions of a diesel engine operating on diesel-RME (rapeseed methyl ester) blends with EGR (exhaust gas recirculation)". *Energy* 32 (2007) 2072–2080.
- (USDA)., U. S. D. o. A. (Producer). (2008) Palm Oil: world supply and distribution retrieved from <http://www.fas.usda.gov/psdonline/>
- Wahid, M. B., Shariff, F. M., Balu, N., & Ismail, N. (2008). EU's Renewable Energy Directive: Possible Implications on Malaysian Palm Oil Trade. *Oil Palm Industry Economic* 8(2).
- Wang, Y., Ou, P. L. S., & Zhang, Z. (2007). Preparation of biodiesel from waste cooking oil via two-step catalyzed process. [doi: DOI: 10.1016/j.enconman.2006.04.016]. *Energy Conversion and Management*, 48(1), 184-188.
- Wiebe, K. A., Croppenstedt, T., Raney, J., Skoet, & Zurek, M. (2008). The State of Food and Agriculture. Rome: *FAO Publications*.
- Yap, D. (Producer). (2006). Players seek more biodiesel perks, retrieved from <http://www.carodiesel.com>
- Yunus, C. A., & Michael, B. A. (2007). *"Thermodynamics: An engineering approach sixth edition (SI Units)"* (Six ed.): The McGraw-Hill Companies.
- Zheng, J. (2009). *Use Of An Engine Cycle Simulation To Study a Biodiesel Fueled Engine*. Shanghai Jiaotong University, Texas.
- Zhou, A., & Thompson, E. (2009). The development of biofuels in Asia. *Applied Energy*, 86, S11-S20.